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SOURCE Referativnyy Zhurnal -- Khimiya No 5, 1953

USSR DISSERTATIONS PRESENTED FOR DEGREES IN CHEMISTRY,
DECEMBER 1953

This report lists 40 dissertations for doctorate and candidate degrees at various USSR institutes of higher education. The information is taken from Referativnyy Zhurnal, No 5, December 1953, published in Moscow by the Academy of Sciences USSR.

The dissertations were submitted in the following fields of Chemistry: Physical Chemistry, Organic Chemistry, Biological Chemistry, Analytical Chemistry, Chemical Technology, Corrosion, Chemical Manufacturing Processes and Equipment, and Safety and Sanitation Techniques. The following information is presented by subject categories, and includes the name of the author, title of dissertation, degree sought, institutional affiliation, and submission date.

PHYSICAL CHEMISTRY

ABRAMCHUK, N. A. -- "Studies of the Dependence of Adsorption Processes of Clays of the Belorussian SSR on Composition, Dispersion, and Conditions of Activation." Cand Chem Sci, Belorussian State U, Minsk 1953.

ANDREYEVA, M. A. -- "On the Changes in the Degree of Dispersion of Solutions Obtained by Means of Colloid Solvents." Cand Chem Sci, State Sci Res Inst of Roentgenology and Radiology, Baku 1953.

BELINA, T. N. -- "Kinetics of Electrochemical Processes of the Ionization of Oxygen and Hydrogen Under Different Pressures." Cand Chem Sci, Inst of Physical Chemistry, Acad Sci USSR, Moscow 1953.

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- BOROVSKIKH, L. A. -- "Investigation Into the Influence of Sodium Sulfate on the Double Decomposition of Sodium Bichromate With Potassium Chloride." Cand Tech Sci, Ural Polytechnic Inst, Sverdlovsk 1953.
- CHESALOVA, V. S. -- "Specific Catalytic Activity of Platinum." Cand Chem Sci, Sci Res Physicochemical Inst imeni L. Ya. Karpov, Moscow 1953.
- FEKLISOV, G. I. -- "Kinetic Method of Investigating the Mechanism of Chemical Reactions by Means of Tagged Atoms." Cand Chem Sci, Inst of Chemical Physics, Acad Sci USSR, Moscow 1953.
- GASILOVA, E. B. -- "Roentgenological Investigation of the Structure of Silicon Carbide." Cand Phys Math Sci, Inst of Crystallography, Acad Sci USSR, Moscow 1953.
- GOROKHOVSKIY, V. M. -- "Polarographic Research Into Complexes of Copper With Different Aromatic Acids and Phenols." Cand Chem Sci, Kazan' State U, Kazan' 1953.
- KASHCHAYEV, G. N. -- "Research Into the Solubility of Metallic Oxides in Fusions of Chlorides and Sulfates of Alkali Metals." Cand Chem Sci, Inst of General and Inorganic Chemistry, Acad Sci USSR, Moscow 1953.
- KAVERIN, S. V. -- "Electronographic Investigation of Nitrides and Certain Iron Carbides of Iron." Cand Phys Math Sci, Inst of Crystallography, Acad Sci USSR, Moscow, Gorkiy State U, Gorkiy 1953.
- KOZEL', B. Sh. -- "Methods to Study the Equilibrium in Heterogenous Salt Systems Contained in Isomorphous Mixtures." Cand Chem Sci, Saratov State U, Saratov 1953.
- KRYUKOVA, T. A. -- "Maxima on the 'Current Potential' Curve and their Significance for Polarographic Analysis." Dr Chem Sci, Inst for Physical Chemistry, Acad Sci USSR, Moscow 1953.
- KUYBINA, N. I. -- "Stabilization and Properties of Direct and Inverse Limited-Concentration Emulsions." Cand Chem Sci, Leningrad Technological Inst, Leningrad 1953.
- KUDRYASHOV, I. B. -- "Influence of Temperature and Composition on the Vapor Tension and Adsorption of Vapors of a Binary Liquid System." Cand Chem Sci, Moscow Chemicotechnological Inst, Moscow 1953.
- LYUBIMOVA, A. V. -- "Light Absorption by Binary and Ternary Systems." Cand Chem Sci, Inst of General and Inorganic Chemistry, Acad Sci USSR, Moscow 1953.
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- NESTEROVA, A. K. -- "Physicochemical Analysis of Fluoride-Silicate Mutual Systems in Which Salts of Alkali Metals and of Alkaline Earth Metals Participate." Cand Chem Sci, Rostov-on-Don State U, Rostov-on-Don 1953.
- NOVIKOV, G. I. -- "Thermodynamic Research on Wolfram Chloride." Cand Chem Sci, Leningrad State U, Leningrad 1953.
- OZHEREL'YEVA, Ye. I. -- "Spectrosensimetric and Spectrophotometric Research Into Various Means of Optical Sensibilization of Photographic Emulsions." Cand Chem Sci, Leningrad Inst of Cinema Engineers, Leningrad 1953.
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- PESHEKHONOVA, N. V. -- "Transition of Glass Electrodes From One Metallic Function to Another." Cand Chem Sci, Leningrad State U, Leningrad 1953.
- POLTORAK, V. A. -- "Research Into the Kinetics of the Cracking of Propane." Cand Chem Sci, Moscow State U, Moscow 1953.
- SHEVCHUK, V. G. -- "Study of the Quarternary System $\text{Na}_2\text{SO}_4 - (\text{NH}_4)_2\text{SO}_4 - \text{ZnSO}_4 - \text{H}_2\text{O}$ by the Method of Physicochemical Analysis." Cand Chem Sci, Inst of General and Inorganic Chemistry, Acad Sci USSR, Moscow 1953.
- SHISHKIN, N. V. -- "Oxonium Salts and Processes of the Formation of Solid Salt Solutions." Dr Chem Sci, Inst of General and Inorganic Chemistry, Acad Sci USSR, Moscow 1953.
- SKRIPOV, V. P. -- "Heat Capacity of Liquid Binary Mixtures in the Critical Area of Layer Formation." Cand Phys Math Sci, Moscow State U, Moscow 1953.
- SIDOROV, I. A. -- "Some Properties of Chloroacetic Acid in Liquid and Supercooled Liquid Conditions." Cand Chem Sci, Khar'kov Polytechnic Inst, Khar'kov 1953.
- TEPLYAKOV, P. A. -- "Effect of Concentration and Solvent on the Phosphorescence of Solutions of Aromatic Compounds at Low Temperature." Cand Phys Math Sci, Gorkiy State Pedagogical Inst, Gorky 1953.
- TSVETKOV, N. S. -- "Research Into the Kinetics of the Polymerization of Unsaturated Hydrocarbons in Emulsions." Cand Chem Sci, L'vov State U, L'vov 1953.
- VABEL', Ye. I. -- "Research Into the Kinetics of the Electrochemical Oxidation of Naphthalene." Cand Chem Sci, Moscow Chemicotechnological Inst, Moscow 1953.
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- BOGDANOV, M. N. -- "Research Into the Theory of the Rearrangement of Salts of Amino and Hydroxy Aromatic Sulfonic Acids." Cand Chem Sci, Inst of Organic Chemistry, Acad Sci Ukrainian SSR, Kiev 1953.
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- KUKHTIN, V. A. -- "Research Into the Field of the Preparation of Unsaturated Esters of Phosphoric Acids and Their Polymerization." Cand Chem Sci, Kazan' Chemico-Technological Inst, Kazan' 1953.
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- SECHERBINSKAYA, N. V. -- "Reciprocal Action of Tertiary Alcohols of the Cyclopropane Series With Mineral and Organic Acids." Cand Chem Sci, Leningrad State U, Leningrad 1953.
- VOLKOVA, L. V. -- "Synthesis of Esters of Bis-benzyl-tetra-hydro-iso-quinolinic Base. (Analogues of the Alkaloid Curarine.)" Cand Chem Sci, Moscow Inst of Fine Chemical Technology, Moscow 1953.
- YARMUKHMETOVA, D. Kh. -- "Synthesis of Esters of Phospho- and Thiophospho-carboxylic Acids by Addition of Partial Esters of Phosphorus Acids to Esters of Unsaturated Carboxylic Acids." Cand Chem Sci, Kazan' State U, Kazan' 1953.

BIOLOGICAL CHEMISTRY

- SINEL'NIKOVA, Ye. P. -- "Protoanemonin and Its Effect on Microorganisms." Cand Biol Sci, Inst of Microbiology, Acad Sci Ukrainian SSR, Kiev 1953.

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- BUKHTIAROV, V. Ye. -- "Use of the Chromatographic Method in the Analysis of Copper-Iron Ceramic Alloys and of Bronze." Cand Tech Sci, Ministry of Defense Industry USSR, Moscow 1953.
- BURMISTROV, S. I. -- "Research in the Field of Qualitative Reactions of Organic Compounds." Dr Chem Sci, Dnepropetrovsk Chemico-technological Inst, Dnepropetrovsk 1953.
- DRANITSKAYA, P. M. -- "Quantitative Determination of Sodium With the Aid of 1,8-Naphthylamine Sulfonic Acid." Cand Chem Sci, Kiev State U, Kiev 1953.

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KAGAN, F. Ye. -- "Use of Iodine Trichloride in the Quantitative Determination of Some Groups of Pharmacological Preparations." Cand Pharm Sci, Kiev Inst for the Advanced Training of Pharmacists, Kiev 1953.

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CHEMICAL TECHNOLOGY

BELYANCHIKOV, N. N. -- "Research Into the Process of Oil Production and Its Mechanization on Collective and State Farms." Cand Tech Sci, Moscow Inst of the Mechanization and Electrification of Agriculture, Moscow 1953.

EFROS, G. M. -- "Technology and Properties of Pumice Slag." Cand Tech Sci, Sci Res Inst of Construction Engineering, Moscow 1953.

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GERASIMOVA, N. A. -- "The Penetrability by Water of Materials Used for Cable-Protecting Coatings." Cand Tech Sci, Leningrad Polytechnic Inst, Leningrad 1953.

GLADYSHEVSKIY, Ye. I. -- "Solid Solutions as Bases of Metal Compounds." Cand Chem Sci, L'vov State U, L'vov 1953.

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- LEEDEEV, A. P. -- "Research Into the Processes of Cooling in Tunnel Kilns for the Firing of Building Bricks." Cand Tech Sci, Belorussian Polytechnic Inst, Minsk 1953.
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- MIDZHOYAN, Ye. L. -- "The Process of Cognac (Brandy) Manufacture." Cand Chem Sci, Chemical Inst, Acad Sci Armenian SSR, Yerevan 1953.
- MINASYAN, M. A. -- "Vegetable Oils and Animal Fats as the Basis for the Production of Machine Oils." Cand Tech Sci, Krasnodar Inst of the Food Industry, Krasnodar 1953.
- MUZYLEV, G. A. -- "Research on the Suspension of Minerals as a Method for the Enrichment of Coal." Cand Tech Sci, Moscow Inst of Mining, Moscow 1953.
- NIKOLAYEV, A. I. -- "Countercurrent Reactor for the Hydrogenation of Fuels With Zone Distribution of Temperature." Cand Tech Sci, Moscow Inst of Chemical Machine Building, Moscow 1953.
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- SHOPENSKIY, A. P. -- "Quick Refrigeration for Low-grade Products." Cand Tech Sci, Moscow Chemicotechnological Inst of the Oil Industry, Moscow 1953.
- SHUMAKOV, A. M. -- "The Uses of Microorganisms (Microflora) in Viniculture." Dr Tech Sci, Georgian Inst of Agriculture, Odessa 1953.
- SOKOLOVA, N. M. -- "Factors Affecting the Wettability of Cotton Fibers." Cand Tech Sci, Moscow Textile Inst, Moscow 1953.
- STETSENKO, A. V. -- "Cyanine Dyes Containing Quinone Nuclei." Cand Chem Sci, Kiev State U, Kiev, 1953.
- SUKHOVA, Ye. I. -- "Development of a Rapid Method of Controlling the Basicity of Open Hearth Slag During Smelting." Cand Tech Sci, Sci Inst of the Ministry of Defense Industry, Leningrad 1953.
- STREL'TSYN, G. S. -- "The Principle of Flotability and Fixation of Hydrophobic Particles in the Boundary Between Water and Air." Cand Tech Sci, Leningrad Inst of Mining, Leningrad 1953.
- TUSHINSKIY, L. I. -- Research Into Low-and Medium-Alloy, High-Speed, Cast Steels." Cand Tech Sci, Leningrad Polytechnic Inst, Leningrad 1953.
- TSAREV, B. A. -- "Oxidation of Color Developer by Atmospheric Oxygen and Silver Bromide." Cand Chem Sci, Leningrad Inst of Cinema Engineers, Leningrad 1953.
- VASSERBERG, A. V. -- Production of Magnesium Oxide, Glauber and Gorkiy (Bitter) Salts from Crude Astrakhanite." Cand Tech Sci, Leningrad Chemicopharmaceutical Inst, Leningrad 1953.
- VOLKOVA, P. I. -- "The Problem of the Influence of Zinc Sulfide on the Properties of Copper Mattes." Cand Tech Sci, Inst of Metallurgy, Acad Sci USSR, Moscow 1953.
- YUFEROV, V. M. -- "Thermic Processing of Steel Strips for Saw Manufacture." Cand Tech Sci, Gor'kiy Polytechnic Inst, Gor'kiy 1953.

CORROSION AND PROTECTION AGAINST IT

- MAMET, A. P. -- "Corrosion and Protection of the Metal of Equipment Exposed to Intense Heat." Cand Tech Sci, Moscow Inst of Power Engineering, Moscow 1953.
- ZAVELEV, G. I. -- "Anticorrosion Cement Insulation for Petroleum Thermal Cracking Apparatus." Cand Tech Sci, Moscow Chemicotechnological Inst, Moscow 1953.

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CHEMICAL MANUFACTURING PROCESSES AND EQUIPMENT

MIKHAYLOV, N. M. -- "The Theory and Calculation of Heat of Cylindrical Dryers."
Cand Tech Sci, Moscow Inst of Power Engineering, Moscow 1953.

SAFETY AND SANITATION TECHNIQUES

DZHAKUPBAYEV, A. N. -- "Preventing and Extinguishing Endogenic Conflagrations
in the Copperpyrite Mines of the Ural." Cand Tech Sci, Inst of Mining,
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